We claim:

1. A composite material comprising; an elastomer polymer matrix having a filler therein of particles formed of an elastomer polymer core, with a conductive metal coating thereon.

2. A composite material as claimed in claim 1 wherein said elastomer polymer matrix is selected from the group consisting of natural rubbers and synthetic rubbers including hydrocarbon rubbers (EPM, EPDM and butyl), nitriles, polychloroprenes, acrylic, fluoro- and chlorosulfonated polyethylenes, polyurethanes, polyethers, polysulfides, nitrosorubbers, silicones and fluorosilicones.

3. A composite material as claimed in claim 2 wherein said particulate elastomer core is selected from the group consisting of natural rubbers and synthetic rubbers including hydrocarbon rubbers (EPM, EPDM and butyl), nitriles, polychloroprenes, acrylic, fluoro- and chlorosulfonated polyethylenes, polyurethanes, polyethers, polysulfides, nitrosorubbers, silicones and fluorosilicones.

4. A composite material as claimed in claim 1 wherein said elastomer polymer matrix is silicone elastomer and said particulate elastomer core is silicone elastomer.

5. A composite material as claimed in claim 3 wherein said conductive metal coating is selected from the group consisting of nickel, copper, aluminum, tin, cobalt, zinc, gold, silver, platinum, palladium, rhodium, iridium and their alloys and combinations thereof.

6. A composite material as claimed in claim 5 wherein the particulate elastomer core is between about 1 and 300 microns in size.

7. A composite material as claimed in claim 5 wherein the particulate elastomer core is between about 20 and 200 microns in size.

8. A composite material as claimed in claim 5 wherein the conductive metal coating comprises about 20 to 90 wt% of the coated particle.

9. A composite material as claimed in claim 5 wherein the conductive metal coating comprises about 30 to 80 wt% of the coated particle.

10. A composite material as claimed in claim 8 in which the coated particulate elastomer core comprises about 30 to 80 wt% of the composite material.

11. A composite material as claimed in claim 3 in which the conductive metal coating is nickel, silver deposited on nickel, or gold deposited on nickel.

12. A composite material as claimed in claim 4 in which the conductive metal coating is nickel, silver deposited on nickel or gold deposited on nickel.

13. A method of providing EMI shielding for application to a substrate comprising the steps of forming a composite of an elastomer polymer matrix and a particulate filler uniformly dispersed in the elastomer polymer matrix, said particulate filler consisting essentially of an elastomer polymer core having a metal coating encapsulating said core.

14. A method as claimed in claim 13 wherein said central elastomer polymer core is selected from the group consisting of natural rubbers and synthetic rubbers including hydrocarbon rubbers (EPM, EPDM, butyl and the like), nitriles, polychloroprenes, acrylic, fluoro- and chlorosulfonated polyethylenes, polyurethanes, polyethers, polysulfides, nitrosorubbers, silicones and fluorosilicones.

15. A method as claimed in claim 14 wherein said elastomer polymer matrix is selected from the group consisting natural rubbers and synthetic rubbers including hydrocarbon rubbers (EPM, EPDM, butyl and the like), nitriles, polychloroprenes, acrylic, fluoro- and chlorosulfonated polyethylenes, polyurethanes, polyethers, polysulfides, nitrosorubbers, silicones and fluorosilicones.

16. .A method as claimed in claim 14 wherein said metal is selected from the group consisting of nickel, copper, aluminum, tin, cobalt, zinc, Ag, Au, Pt, Pd, Ir and Rh and alloys thereof.

17. A method as claimed in claim 13 wherein the metal is nickel, silver deposited on nickel or gold deposited on nickel and the particulate elastomer polymer core and the elastomer polymer matrix are the same.

18. A method as claimed in claim 17 in which the elastomer polymer is silicone elastomer.

19. A method as claimed in claim 15 in which the conductive metal is nickel, silver deposited on nickel or gold deposited on nickel.